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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,249	11/10/2003	Warren M. Farnworth	2269-5558J US (99-0253.09)	3194
24247	7590	05/25/2006	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			EWALD, MARIA VERONICA	
			ART UNIT	PAPER NUMBER

1722

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,249

Applicant(s)

FARNWORTH, WARREN M.

Examiner

Maria Veronica D. Ewald

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 10-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage of application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s):

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/39)
Paper No(s)/Mail Date: 12/04&3/05

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Election/Restrictions

13. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 1-9, drawn to a stereolithography apparatus, classified in class 425, subclass 174.4.
 - II. Claims 10-20, drawn to a process of removing gas bubbles, classified in class 264, subclass 442.

The inventions are distinct, each from the other because of the following reasons:

1. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the apparatus as claimed can be used to practice another and materially different process such as a process of applying a coating onto a preformed product.
2. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
3. During a telephone conversation with Brick G. Power (by Examiner Leo Tentoni, GAU 1732), applicant's representative, on 15 May 2006, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-9. Affirmation of

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this election must be made by applicant in replying to this Office action. Claims 10-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Leyden, et al. (U.S. 5,143,663). Leyden, et al. teach a stereolithography apparatus, comprising: a fabrication chamber in which a volume of liquid material is contained (item 100 – figures 4c and 4d; column 20, lines 34 – 50); and a bubble elimination system associated with the fabrication chamber and configured to facilitate removal of gas bubbles from the volume of liquid material (column 22, lines 23- 40; column 23, lines 20 – 30); wherein the bubble removal elimination system causes the liquid material to vibrate (column 22, lines 23 – 27); wherein the bubble elimination system is associated with a wall of the fabrication chamber (item 110 – figure 4c; column 22, lines 25 – 30).

With respect to claims 4 – 9, Leyden, et al. further teach that the bubble elimination system is associated with a structure located at least partially within the fabrication chamber (column 22, lines 25 – 30); wherein the structure located at least partially within the fabrication chamber comprises a fabrication support (column 21,

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lines 15 – 35; column 22, lines 25 – 40); wherein the bubble elimination system comprises an ultrasonic transducer (item 110 – figure 4c; column 22, lines 25 – 27); wherein the ultrasonic transducer comprises a piezoelectric transducer (item 110 – figure 4c; column 11, lines 25 – 30; column 12, lines 60 – 68); wherein the apparatus is further comprised of a negative pressure source for applying a negative pressure to a surface of the volume of liquid material (column 22, lines 25 – 35; column 23, lines 20 – 30); and wherein the negative pressure source is configured to apply negative pressure sufficient for removing gas bubbles at or near the surface (column 23, lines 23 – 26).

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hirano, et al. (U.S. 5,089,184). Hirano, et al. teach a stereolithography apparatus, comprising: a fabrication chamber in which a volume of liquid material is contained (item 11 – figure 2); and a bubble elimination system associated with the fabrication chamber and configured to facilitate removal of gas bubbles from the volume of liquid material (column 4, lines 1 – 8; column 5, lines 25 – 35; column 6, lines 51 – 63).

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Veronica D. Ewald whose telephone number is 571-272-8519. The examiner can normally be reached on M-F, 8 - 4:30.

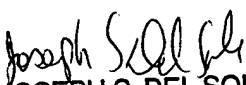
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on 571-272-1316. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVE


JOSEPH S. DEL SOLE
PRIMARY EXAMINER
5/23/06